

## IN THE SPECIFICATION

**Amend the paragraph at page 12, lines 1 through 16 to read as follows.**

It is apparent that although a variety of methods have been devised to compatibilize internal release agents and other polymeric additives with the primary resins of toner compositions, a need remains for more effective and/or economical compatibilizers for these internal release agents. It is known in the art that block and graft copolymers are effective compatibilizers of polymer blends. It is also well known that where one phase is a dominant material in a blend, assymetric block compatibilizer copolymers are more effective at compatibilization of the blend than copolymers with equal length blocks. ~~It is also known in the art that block copolymers are one end of a spectrum of copolymers that ranges from alternating to block copolymers. This is to say that for a copolymer made from A and B monomers, one end of the spectrum is a polymer comprised of strictly alternating A-B-A-B units (an "alternating copolymer"), while the other end is a polymer having one end A-A-A in a single block with the other end B-B-B in a single block (a "block copolymer"). Random copolymers lie within these two extremes. They~~ Random copolymers are comprised of segments of A and segments of B monomer occurring along the polymer chain, the segments containing a random number of repeat units with each occurrence.

**Amend the paragraph at page 14, line 22 through page 15, line 21 to read as follows.**

\ Random copolymers are composed of domains of their monomer components interspersed in the polymer chain. ~~They range from the extreme of "pure" alternating copolymers to "pure blocky" copolymers.~~ The degree to which a random copolymer has domains resembling ~~resembles~~ a "pure block" or a "pure alternating" copolymer depends

upon the conditions under which it was polymerized. The relative reaction rates of monomer self addition versus co-monomer addition (also called reactivity ratio rates) also contribute to the "blocky" or "alternating" character of the random copolymer. For example, the two extremes of relative reaction rates (self addition/co-monomer addition) are zero and infinity. The rate is zero if an A moiety in a polymer chain can only add a B monomer to it. The rate is infinity where an A moiety in a polymer chain adds another A monomer unit at a rate that is infinitely fast compared to A/B addition. In the first case, a pure alternating copolymer will result. In the second case, a pure blocky copolymer of A will form, then add B moieties. Between these two extremes, copolymers containing segments of varying lengths of A and B moieties interspersed will result. This concept can be expressed according to the following relationship:

$$r_1 = k_{aa}/k_{ab} \quad r_2 = k_{bb}/k_{ba}$$

where  $r_1$  (the "monomer 1 reactivity ratio") is the ratio of the rate of addition of an "A" monomer moiety to a growing "A" polymer chain ( $k_{aa}$ , self addition rate) divided by the rate of the addition of a "B" monomer moiety to a growing "A" moiety polymer chain ( $k_{ab}$ , alternating addition rate) and  $r_2$  (the "monomer 2 reactivity ratio") is the ratio of the rate of addition of a "B" monomer moiety to a growing "B" polymer chain ( $k_{bb}$ , self addition rate) divided by the rate of the addition of an "A" monomer moiety to a growing "B" moiety polymer chain ( $k_{ba}$ , alternating addition rate). Cast in these terms, as the rate of "A" moiety self addition becomes fast relative to "B" co-monomer addition ( $k_{aa} > k_{ab}$ ),  $r_1$  becomes increasingly large. As the rate of "B" moiety self addition becomes fast relative to "A" co-monomer addition ( $k_{bb} > k_{ba}$ ),  $r_2$  becomes increasingly large. For the purposes of producing a co-polymer in one reaction step that is suitable for use as a

compatibilizer, it is most desirable to have the situation in which  $r_1$  and  $r_2$  are both much greater than 1.